

WHAT IS CLAIMED IS:

1. A hydrodynamic torque transmitting device, comprising:
 - an input side front cover;
 - an impeller coupled to the front cover to form a fluid chamber therewith;
 - 5 a turbine having a turbine hub, and a vane portion disposed inside the fluid chamber and opposite the impeller; and
 - a piston having a disk-shaped main body, a frictional coupling portion disposed on an outer peripheral portion of the main body that is capable of frictionally coupling with the front cover, and a support portion that supports the turbine in the
 - 10 axial direction when the piston moves toward the front cover, the piston disposed so as to divide a space between the front cover and the turbine into a front chamber on a front cover side and a rear chamber on a turbine side and capable of moving toward and away from the front cover by means of a pressure differential created by fluid between the front chamber and rear chamber;
 - 15 wherein the turbine hub and the front cover respectively include opposing portions that are mutually opposed to each other across a space in an axial direction; and
 - a gap in the axial direction is maintained between the opposing portions so that a load from the turbine will not be applied to the front cover when the piston
 - 20 moves to a position closest to the front cover.
2. The hydrodynamic torque transmitting device according to claim 1, wherein:
 - the opposing portions are directly opposite each other in the axial direction; and
 - 25 the axial distance between the opposing portions is longer than the axial distance between the frictional coupling portion and the front cover when the piston moves to a position furthest from the front cover.
3. The hydrodynamic torque transmitting device according to claim 1, wherein the support portion of the piston is an annular portion having a constant
- 30 radial width.
4. The hydrodynamic torque transmitting device according to claim 3, wherein the radial width of the support portion of the piston is larger than a plate thickness of the piston.

5. The hydrodynamic torque transmitting device according to claim 4, wherein the radial width of the support portion of the piston is two or more times larger than the plate thickness of the piston.

6. The hydrodynamic torque transmitting device according to claim 1, wherein the turbine side of the support portion of the piston has a flat surface that extends perpendicular to the rotation axis.

7. The hydrodynamic torque transmitting device according to claim 1, wherein:

the piston includes a cylindrical portion that extends from an inner peripheral edge of the main body of the piston toward the front cover; and

the inner peripheral surface of the cylindrical portion is supported on an outer peripheral surface of the turbine hub such that the cylindrical portion can move in a rotational direction and the axial direction.

8. The hydrodynamic torque transmitting device according to claim 7, wherein the axial position of the axial end of the cylindrical portion matches the axial engine side surface of the turbine hub.

9. The hydrodynamic torque transmitting device according to claim 7, wherein a portion of the turbine hub that is in contact with the cylindrical portion includes a seal member that seals an inner peripheral portion between the front chamber and the rear chamber.